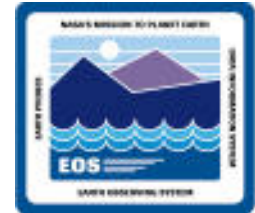


MSS Training Mgmt Design Review

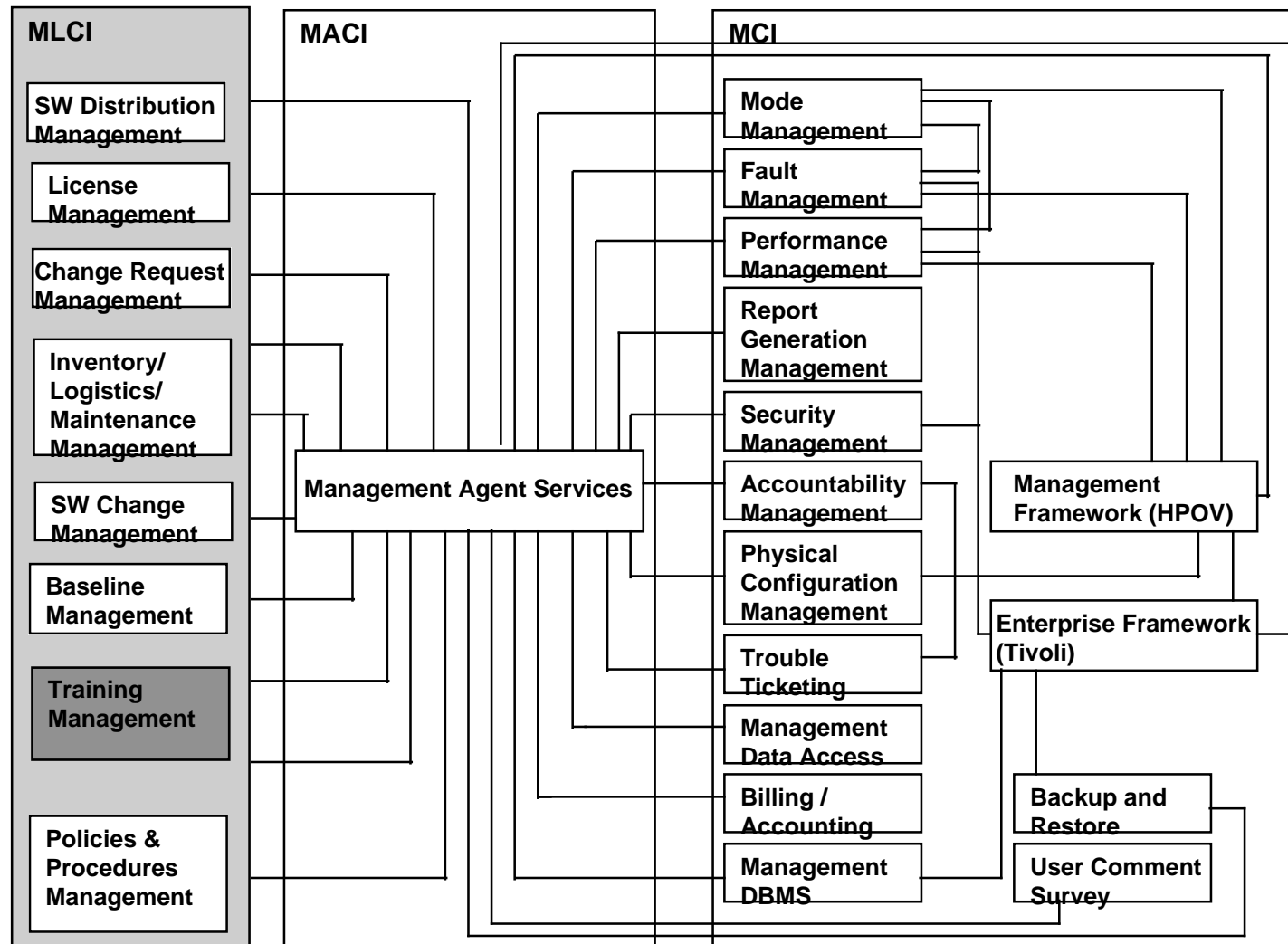
Brett Hinkel

bhinkel@eos.hitc.com

16 April 1996



MSS Software Architecture Overview



MSS Training Management Overview



- **Driving Requirements**
- **Training Software Architecture**
- **User Interface**
- **Data Model**
- **Object Model**
- **Dynamic Model/Event Trace**

REFERENCE MATERIAL

- **Functional Description**
- **Workflow Analysis**

MSS Training Management Driving Requirements



- **General Functional Description**

- supports training and certification programs for M&O employees.
- supports the development and maintenance of training materials (through OA tools), as well as the capability to search for these materials in inventory.
- supports course evaluations, which are available for review and processing.
- supports the input, storage, maintenance, viewing, and printing of training information, including training and resource requirements, trainee information, and course descriptions.
- supports the development and maintenance of training schedules (with dependency on PDPS Resource Planning).

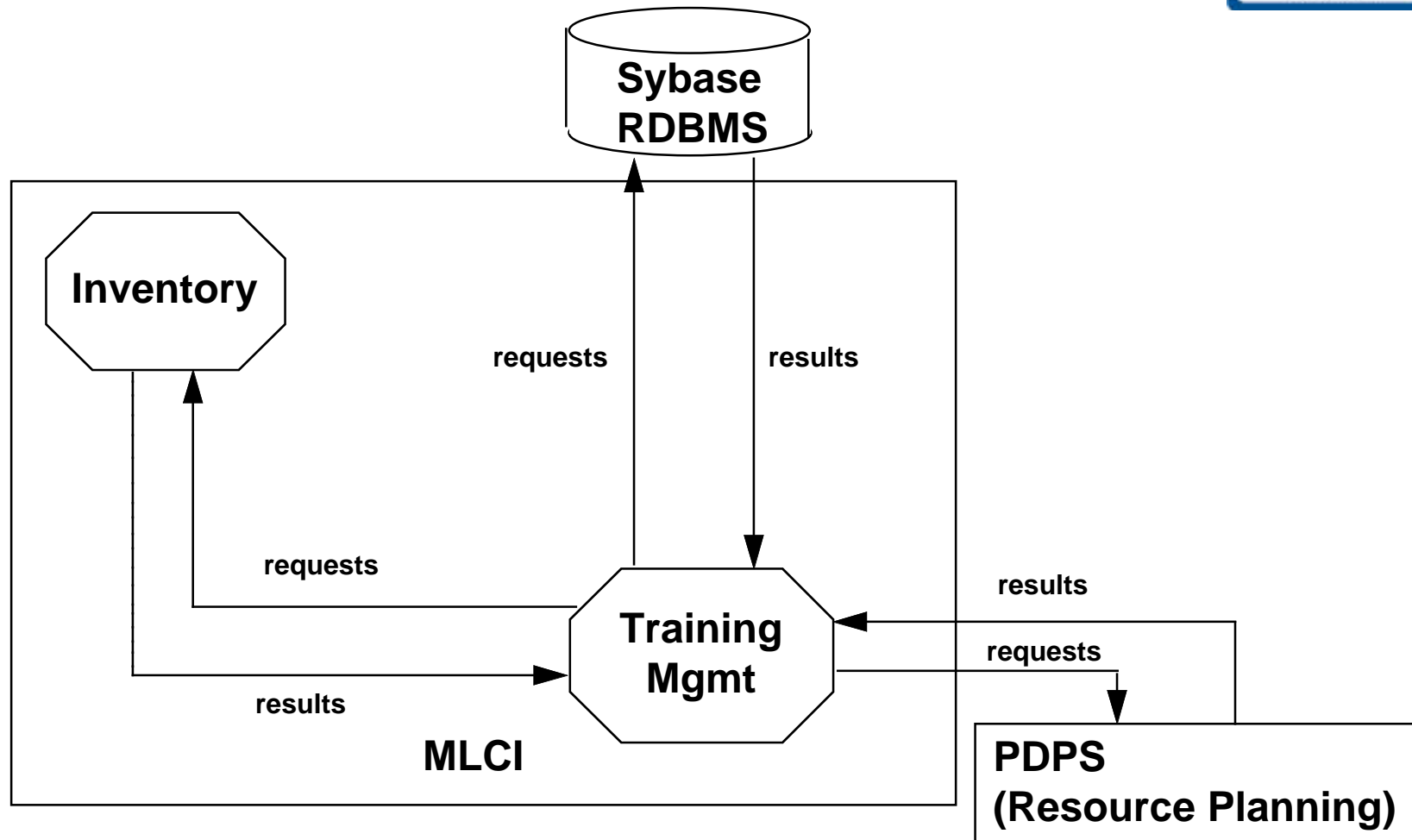
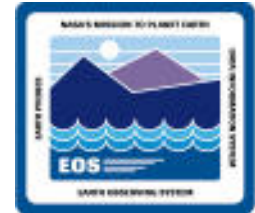
- **New Release B Features**

- entire Service is new to Release B.

- **Document Reference**

- see the Release B CSMS System Management Subsystem Design Specification, 305-CD-029-002, Section 5.9.

MSS Training Management Software Architecture

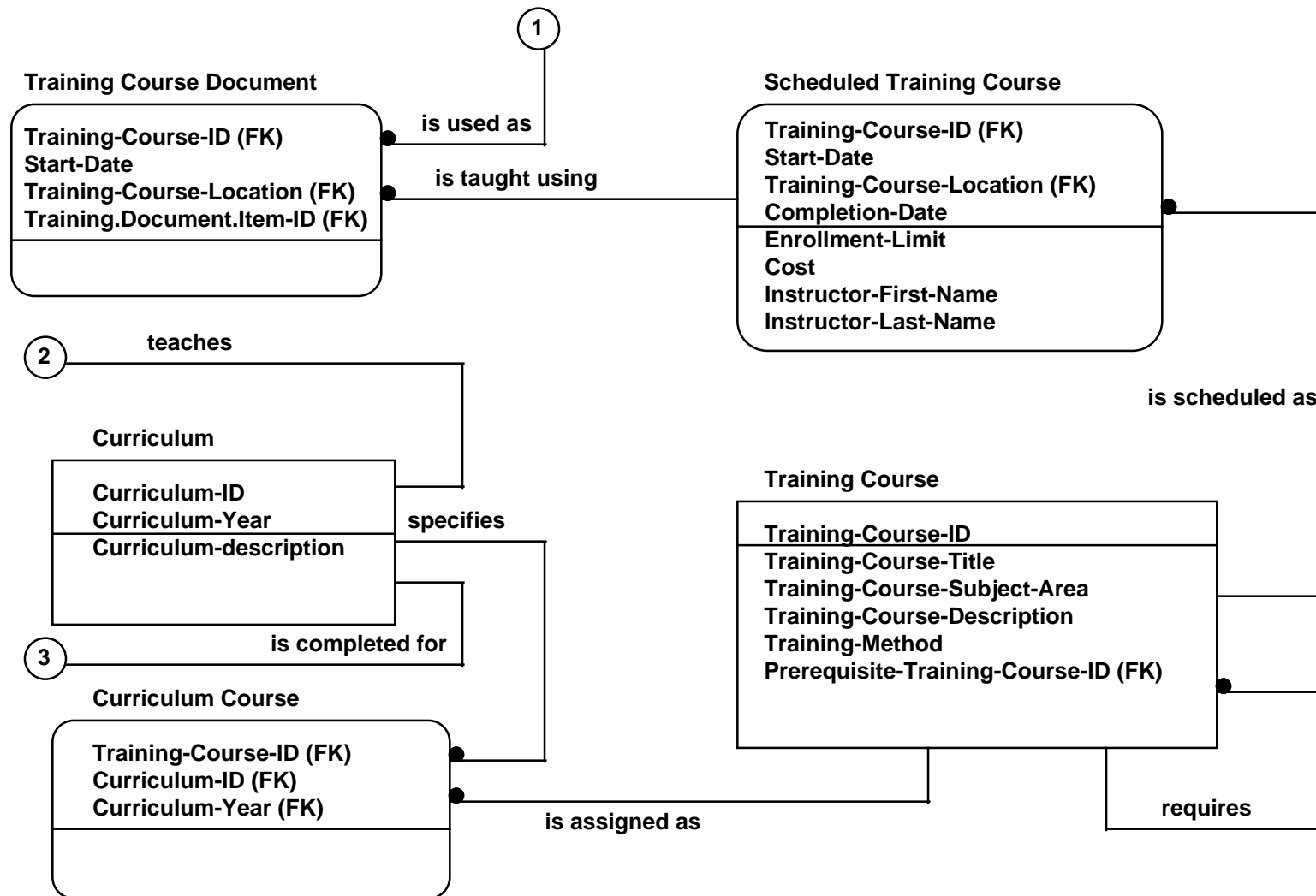


MSS Training Management User Interface

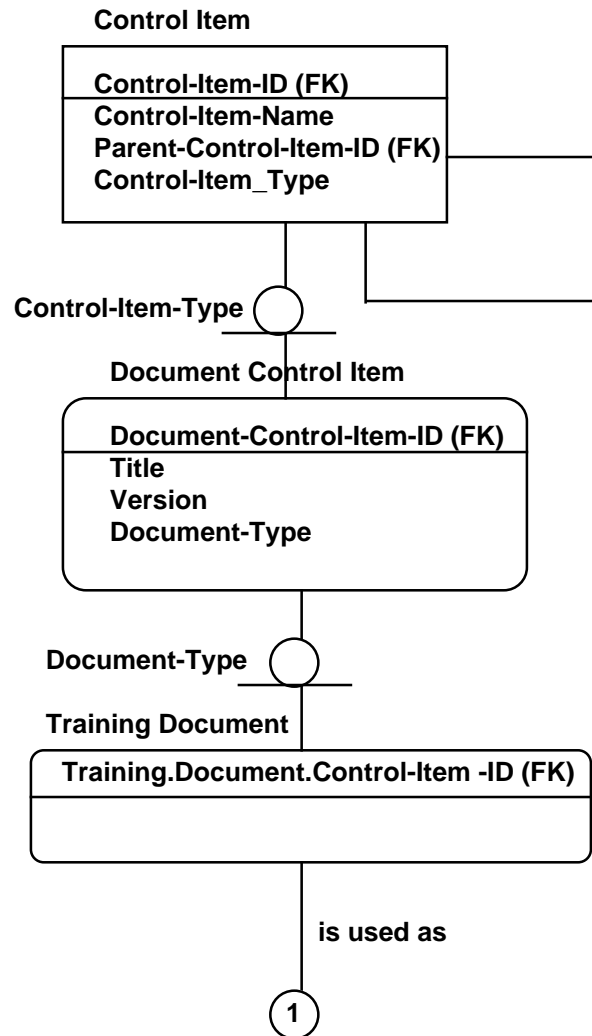


- Operator will be a member of M&O staff
- Custom-developed GUI screens will be available for the operator, allowing the operator access to the Sybase database where the training information is being stored. The operator can then update, add, delete, view, or print any training information desired by selecting the appropriate options.

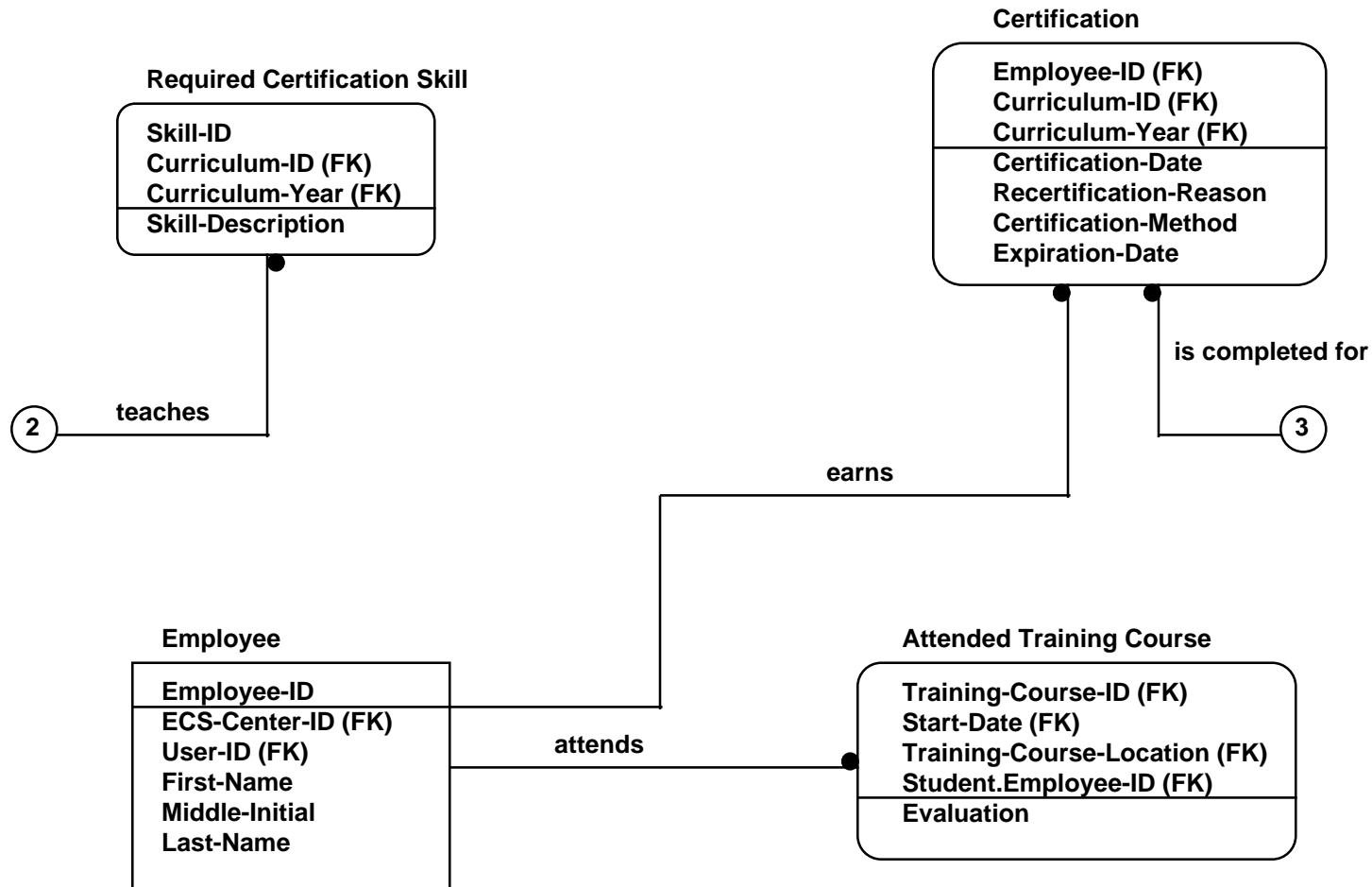
MSS Training Management Data Model



MSS Training Management Data Model (cont.)



MSS Training Management Data Model (cont.)

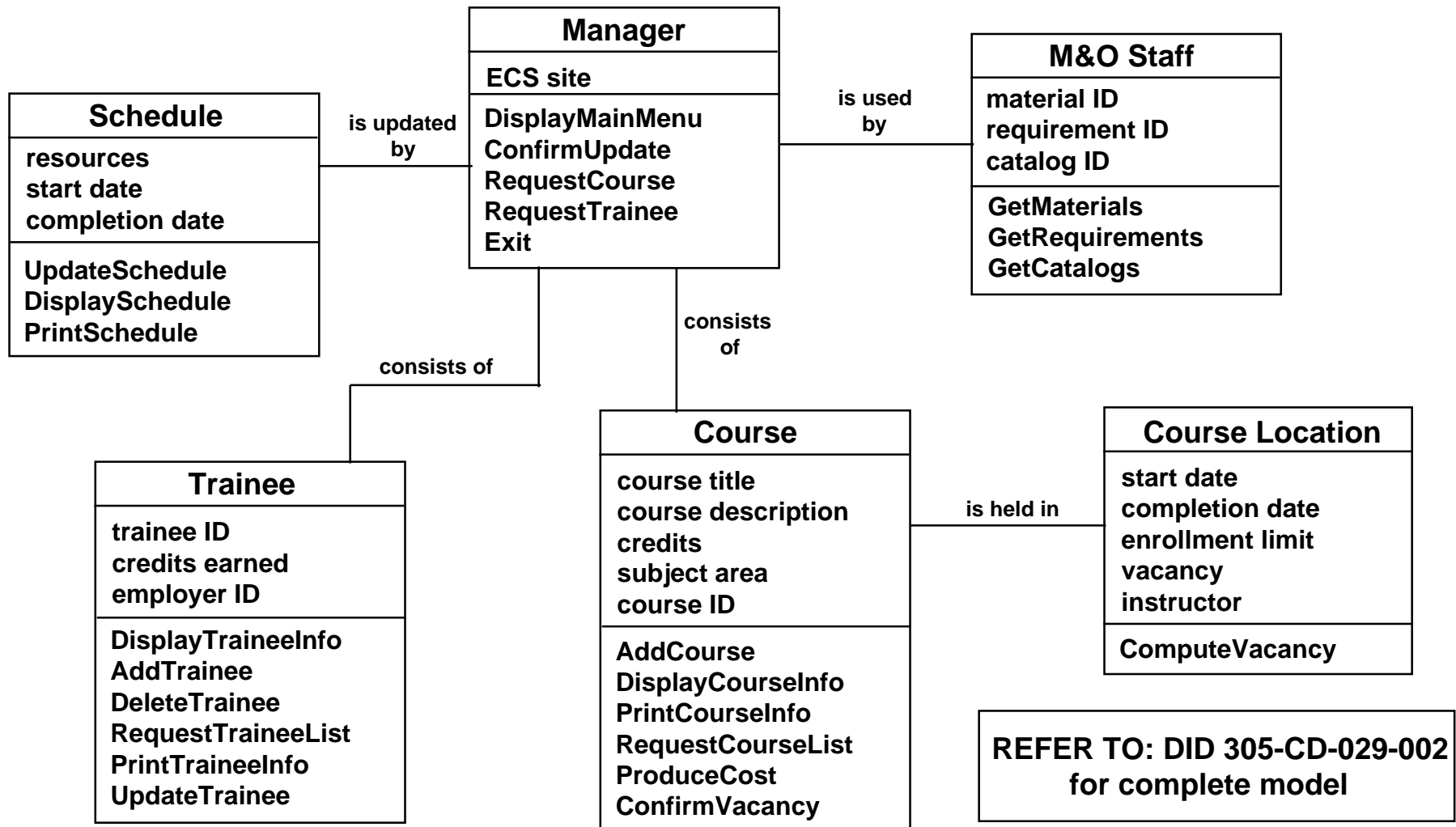


MSS Training Management Object Model

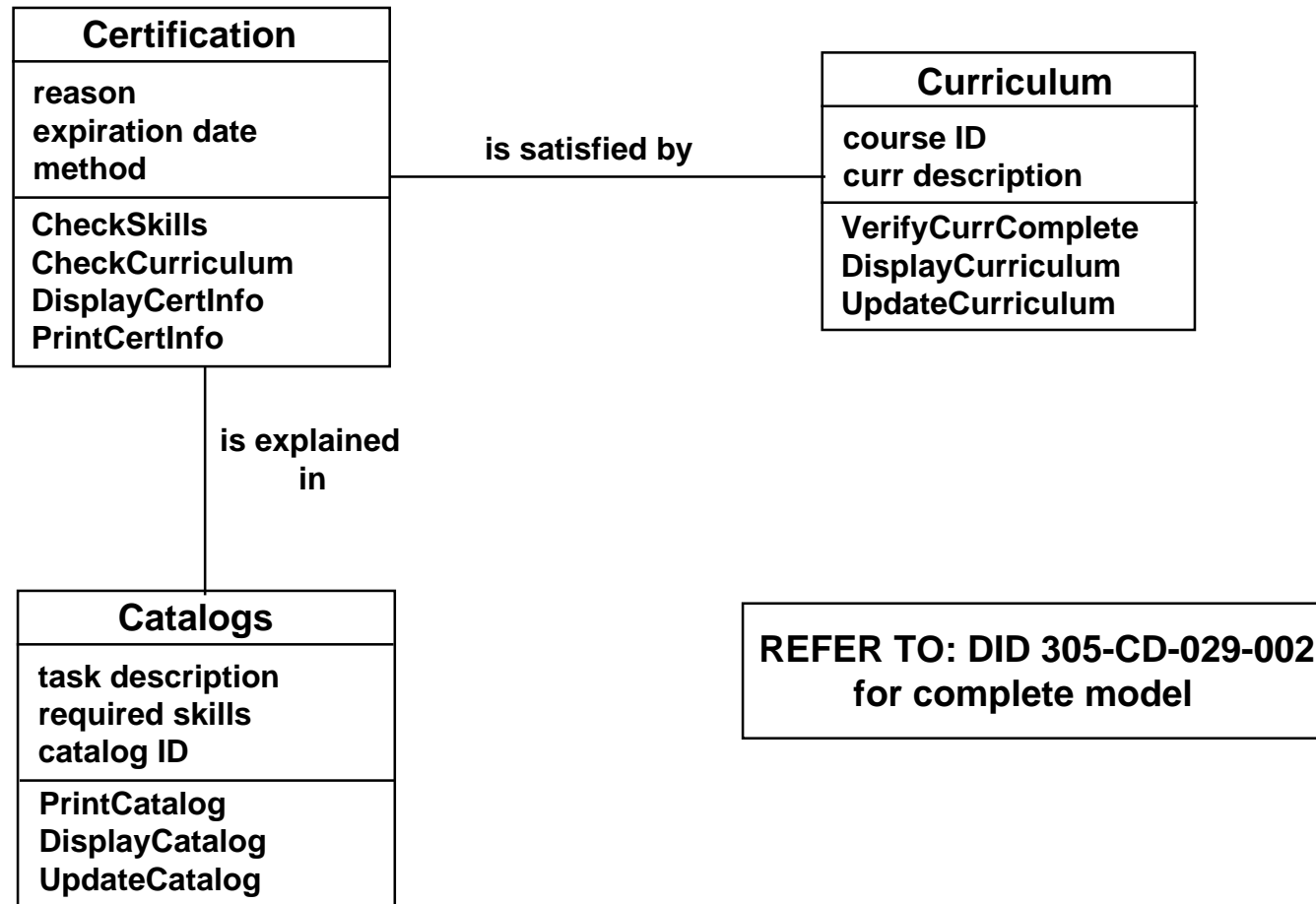


- For sake of clarity, object model has been broken down into five functional areas:
 - 1) Scheduling trainee for course
 - 2) Certification of trainees
 - 3) Evaluation of courses
 - 4) Database setup/GUI development
 - 5) Inventory integration
- For complete object model, refer to the Release B CSMS System Management Subsystem Design Specification, 305-CD-029-002, Section 5.9.3, Figure 5.9-2.

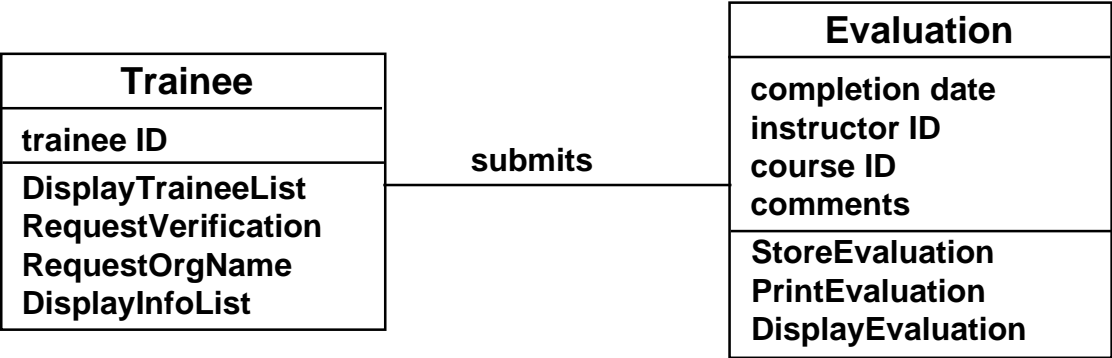
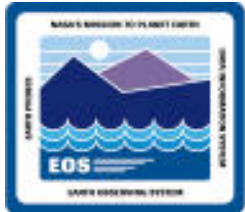
MSS Training Management Object Model (Scheduling)



MSS Training Management Object Model (Certification)



MSS Training Management Object Model (Evaluation)



**REFER TO: DID 305-CD-029-002
for complete model**

MSS Training Management Dynamic Model



The following event trace will be reviewed:

Scheduling a Trainee for a Course, 305-CD-029-002, Section 5.9.4,

Figure 5.9-3.



MSS Training Management Event Trace

Scheduling_a_Trainee_for_a_Course

Scenario

This scenario takes place when an M&O employee needs to be scheduled to attend a training course. It traces the events associated with selecting the trainee to be scheduled, selecting the course the trainee is to attend, selecting the preferred date on which the course is to be attended, checking if the course is vacant, and updating the training schedule.

Assumptions/Preconditions

- all necessary training information is already in the database.
- M&O operator has already been authorized to access and update the system.
- system has already entered the Main Menu.

MSS Training Management



REFERENCE MATERIAL



MSS Training Management Functional Model

The following functional models will be reviewed (these are all used in the “Scheduling a Trainee for a Course” event trace):

MsMITrTraineeB::RequestTraineeList()	305-CD-029-002, Section 5.9.3
MsMITrTraineeB::DisplayTraineeList()	305-CD-029-002, Section 5.9.3
MsMITrCourseB::RequestVerification()	305-CD-029-002, Section 5.9.3
MsMITrCourseB::ConfirmVacancy()	305-CD-029-002, Section 5.9.3
MsMITrMgrB::ConfirmScheduleUpdate()	305-CD-029-002, Section 5.9.3
MsMITrMgrB::RequestCourse()	305-CD-029-002, Section 5.9.3
MsMITrMgrB::RequestTrainee()	305-CD-029-002, Section 5.9.3
MsMITrMgrB::RequestExit()	305-CD-029-002, Section 5.9.3

MSS Training Management Functional Descriptions



MsMITrTraineeB::RequestTraineeList

arguments: none

return value: RWCString (traineeRole)

This requestor asks the operator to choose which type of list of trainees to display to the screen. The operator has two options: list all trainees alphabetically, or list the trainees alphabetically for a particular trainee role. If the latter is chosen, this function invokes MsMITrTraineeB::RequestRole to determine for which role the trainee list is to be displayed.

::DisplayTraineeList

arguments: traineeRole

argument type: RWCString

description: traineeRole identifies which role of trainees to display in the list.

return value: EcTVoid

This function displays a list of current trainees in the training database. If traineeRole is NULL, this function has been called by MsMITrTraineeB::RequestTraineeList, and the entire list of trainees is displayed. If traineeRole has a value, this function has been called by MsMITrTraineeB::RequestRole, and a list of trainees in that role is displayed.



MSS Training Management Functional Descriptions

MsMITrCourseB::RequestVerification

arguments: startDate

argument type: RWDate

description: startDate identifies the date on which the course to be scheduled begins.

return value: EcTVoid

This requestor redisplay the selected preferred date to the operator and asks the operator if the date is correct. If the operator selects 'No', this function invokes MsMITrCourseB::DisplayCourseInfo to allow the operator to select the date again. If the operator selects 'Yes', this function invokes MsMITrCourseB::ConfirmVacancy to determine if the course has any openings on the preferred date.

::ConfirmVacancy

arguments: courseID

argument type: RWCString

description: courseID identifies which course is to be checked for vacancy.

return value: EcTVoid

This function checks to see if the course selected (represented by courseID) has any vacancies by calling MsMITrCourseLocationB::ComputeVacancy, which computes the vacancy by subtracting the current course enrollment from the course's enrollment limit.

MSS Training Management Functional Descriptions



MsMITrMgrB::ConfirmScheduleUpdate This function, once the preferred date has been verified, invokes the **MsMITrScheduleB::UpdateSchedule** function, which updates the current training schedule with all the new updated training information. A confirmation that the schedule has been updated is returned to this function.

arguments: none

return value: EcTVoid

::RequestCourse This requestor asks the operator whether another course should be scheduled for this trainee. If the operator selects 'Yes', then this function invokes **MsMITrCourseB::RequestCourseList** to ask the operator to select how to display the list of courses. If the operator selects 'No', this function invokes **MsMITrMgrB::RequestTrainee** (see next slide).

arguments: none

return value: EcTVoid



MSS Training Management Functional Descriptions

MsMITrMgrB::RequestTrainee

arguments: none

return value: EcTVoid

This requestor, invoked by RequestCourse, asks the operator whether to schedule another trainee for training. If the operator selects “Yes”, this function invokes MsMITrTraineeB::RequestTraineeList to ask the operator how to display the list of trainees. If the operator selects “No”, this function invokes MsMITrMgrB::RequestExit (see below).

::RequestExit

arguments: none

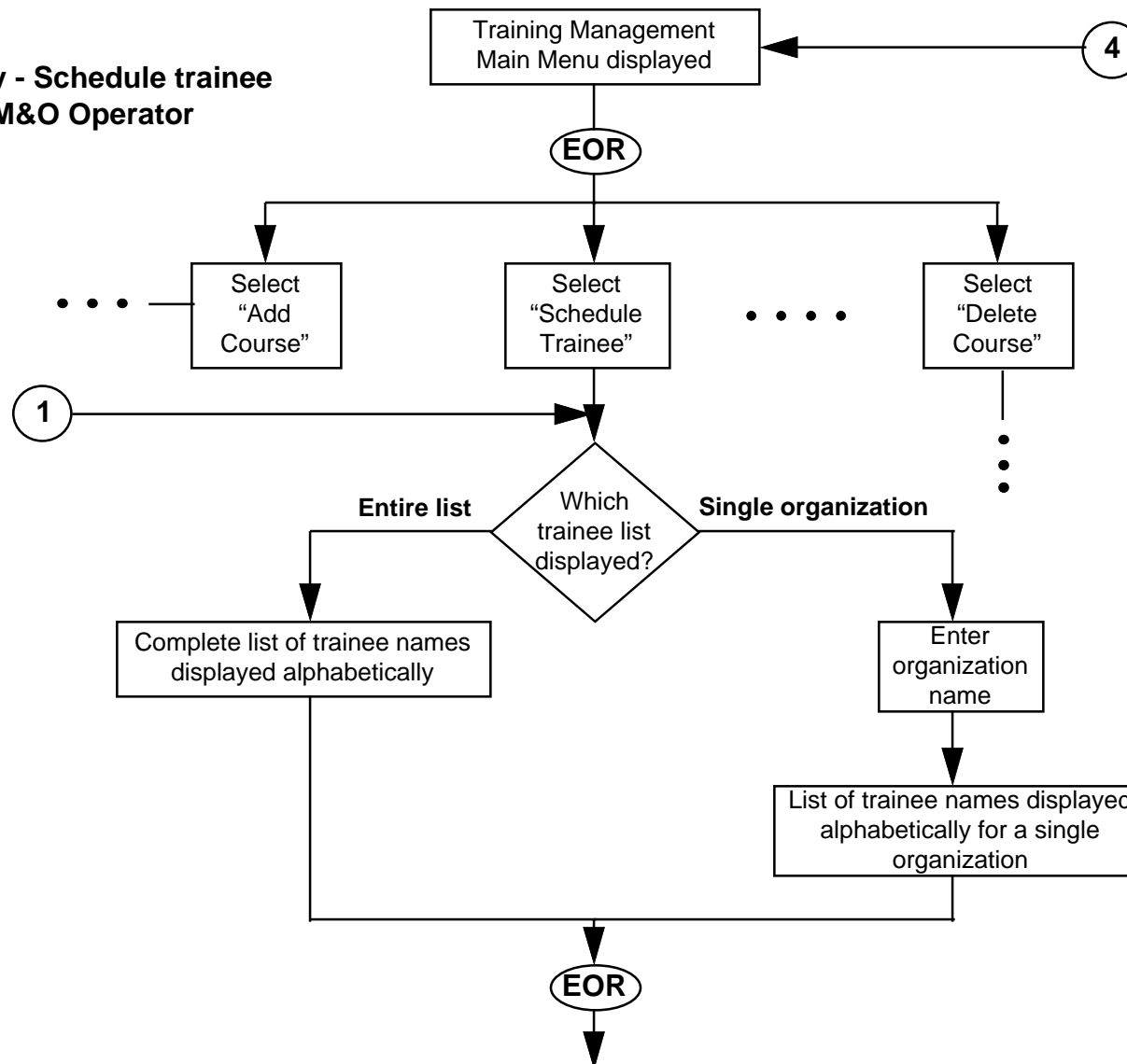
return value: EcTVoid

This requestor, which can be invoked at any time throughout a session with this system, asks the operator whether or not to exit the system. If the operator selects ‘No’, this function invokes MsMITrMgrB::DisplayMainMenu and redisplay the main menu to the screen. If the operator selects ‘Yes’, this function invokes MsMITrMgrB::Exit to gracefully exit from the system.



Schedule Trainee for Course Workflow

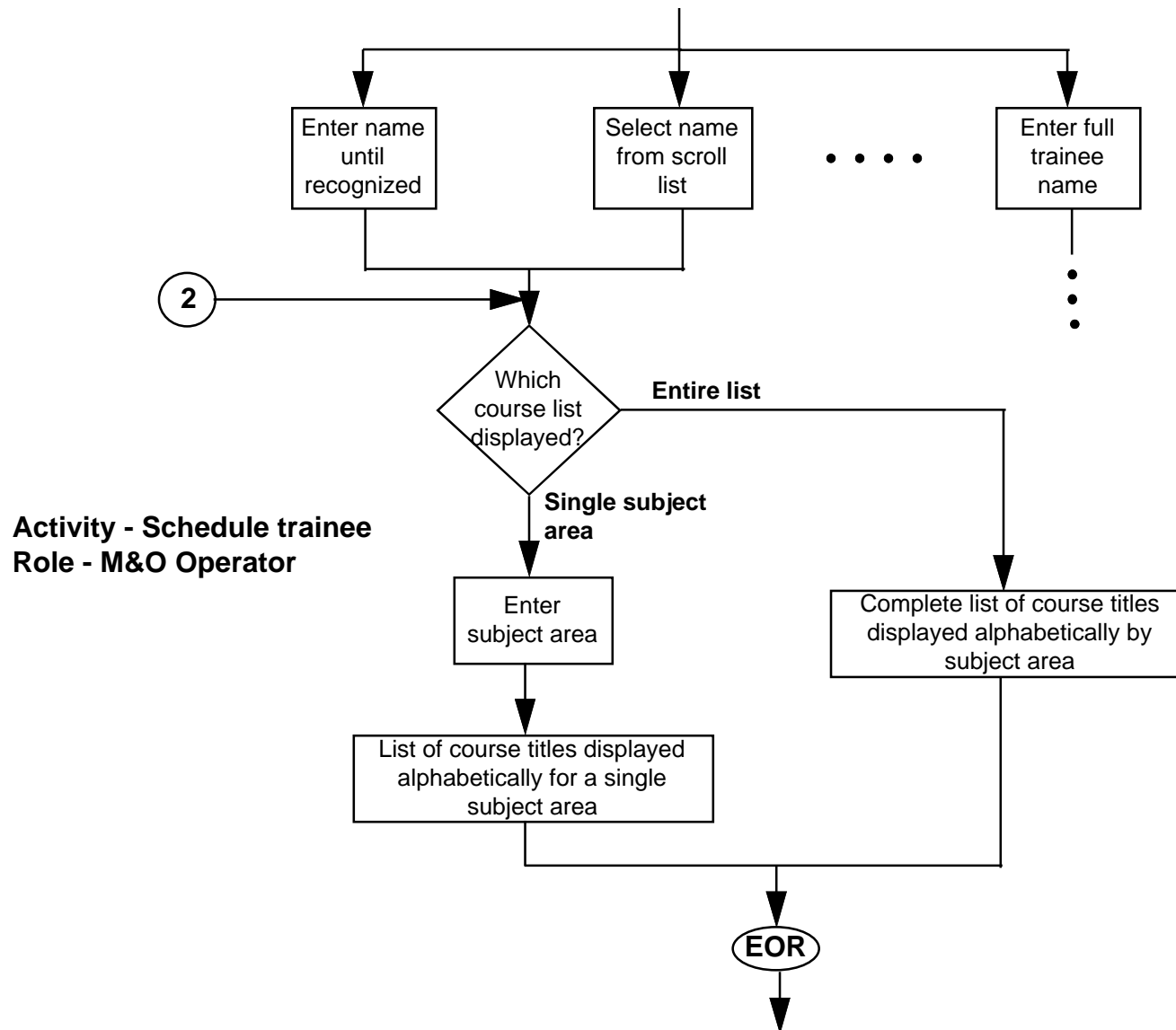
Activity - Schedule trainee
Role - M&O Operator



Assumptions:

- M&O operator has been authorized to access and update the system.
- All necessary training information has been entered in the database.
- The operator has entered the system's Main Menu.

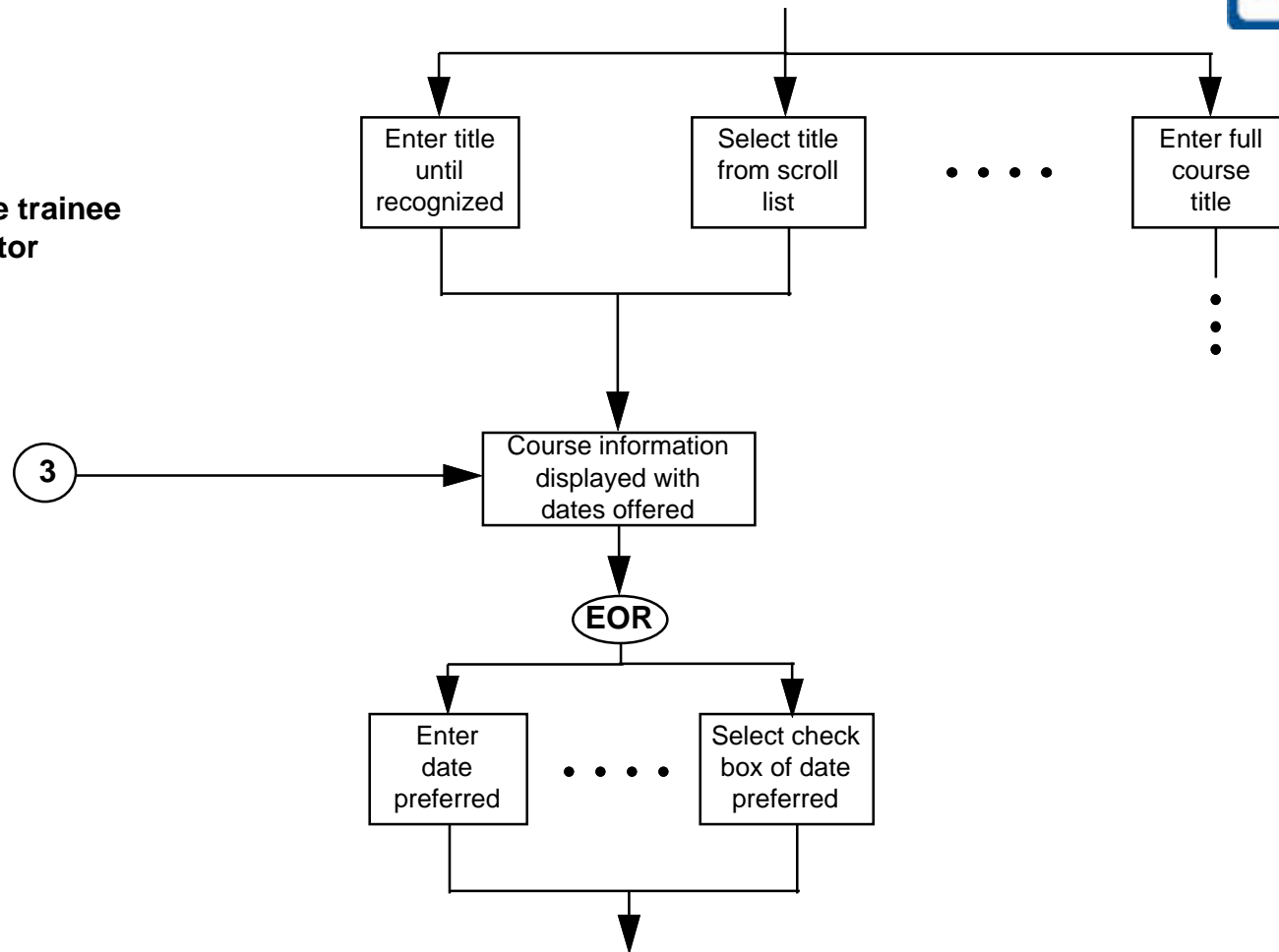
Schedule Trainee for Course Workflow (cont.)



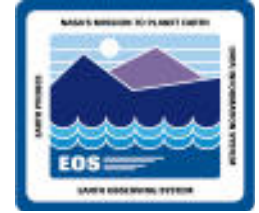
Schedule Trainee for Course Workflow (cont.)



Activity - Schedule trainee
Role - M&O Operator



Schedule Trainee for Course Workflow (cont.)



Activity - Schedule trainee
Role - M&O Operator

